

S E C R E T

25X1A

INR 13613

TIME 14/1500Z MAR 66 PJF

S E C R E T 141304Z

PRIORITY ☐ INFO ☐ CITE ☐

25X1A

IDEALIST MAINT-LOGS

SUBJ: AIRFRAME INTEGRITY INSP FINAL REPORT ART 384

THE FOLLOWING IS FINAL REPORT OF ALL DISCREPANCIES FOUND BY
 LAC TEAM. IT IS FELT THAT NONE OF THE DISCREPANCIES (WITH THE
 EXCEPTION OF PARA 3 BELOW) WERE OF MAJOR CONSEQUENCE.

A. L AND R WING LOWER SURFACE FROM ROOT RIB OUTBOARD APPROX 24
 INCHES - SCRATCHES VARYING FROM 1/8 INCH TO 12 INCHES LONG AND UP
 TO APPROX .010 DEEP IN RANDOM DIRECTIONS WERE FOUND ON BOTH WINGS.
 APPROX 25 SCRATCHES ON LEFT WING AND 23 ON RIGHT WING. THESE WERE
 WORKED WITH 400 PAPER AND CLEANED UP ACCEPTABLY.

B. L AND R WING LOWER LEADING EDGE AT ROOT - TWO CHAFE MARKS
 APPROX .015 DEEP, CAUSED BY RUBBING OF UP-SET RIVET HEADS INSIDE
 THE LEADING EDGE FILLET, WERE FOUND ON EACH WING. THE CHAFE
 MARKS WERE WORKED THE MINIMUM REQUIRED TO INSURE AGAINST SHARP GROOVES
 THAT WOULD CAUSE STRESS CONCENTRATIONS. THE UP-SET RIVET HEADS IN THE
 LEADING EDGE FILLET WERE WORKED DOWN SLIGHTLY TO PREVENT FUTURE
 CHAFING.

C. L AND R WING LOWER SURFACE AT W.S. 60 AND W.S. 190 ACCESS
 PLATES - CRACKED PAINT AT THE RIVET HEADS LOCATED AT THE INBOARD

INR 13613 (PAGE 1 OF 3)

C R E T

IN: 10613 CITE:

AND OUTBOARD ENDS OF EACH OF THE FOUR ACCESS PLATE CUT-OUTS INDICATES "RIVET WORKING". DYE CHECK AND X-RAY OF THE FOUR AREAS REVEALS NO ABNORMAL CONDITIONS. RIVETS ARE NOT TIPPED OR CUPPED.

D. L AND R WING LOWER SURFACE AT 15 PER CENT CORD, (SPANWISE SPLICE), FROM THE SLIPPER TANK OUTBOARD APPROX 3 FEET - CRACKED PAINT AND SEEPING FUEL AT RIVET HEADS. RIVETS ARE TIGHT AND SHOW NO EVIDENCE OF TIPPING OR CUPPING.

E. FUSELAGE SKIN TO MAIN FRAME RIVETS - EVIDENCE OF RIVETS WORKING PARTICULARLY IN THE AREA BELOW THE WING. RIVETS ARE NOT TIPPED. ONLY VERY SLIGHT CUPPING IS EXHIBITED BY A FEW RIVETS.

F. FUSELAGE MAIN FRAME SEGMENTS BETWEEN LOWER LONGERONS AND THE LOWER LONGERONS - MINOR NICKS, SCRATCHES AND GOUGES WERE FOUND AND CLEANED UP.

G. AFT ENGINE MOUNT SUPPORT RING - THE AFT MOUNT SUPPORT RING SEGMENT BETWEEN THE UPPER LONGERONS EXHIBITED REDUCED PROPERTIES DUE TO AN OVERTEMP CONDITION. THE REDUCTION IN PROPERTIES WAS GREATEST AT THE ENGINE MOUNT ATTACH POINT AND DIMINISHED SOMEWHAT NEAR THE UPPER LONGERONS. THE RING SEGMENT WILL BE REPLACED AND THE DAMAGED SEGMENT RETURNED TO THE FACTORY FOR FURTHER ANALYSIS.

H. UPPER FWD CORNER OF THE RIGHT HAND SPEED BRAKE WELL - THE STRUCTURE ON THIS CORNER OF THE SPEED BRAKE WELL EXHIBITS REDUCED PROPERTIES DUE TO AN OVERTEMP CONDITION. BARCOL AND EDDY CURRENT TESTS REVEAL PROPERTIES NEAR THE MINIMUM FOR THE MATERIAL. THIS STRUCTURE IS NOT CRITICALLY STRESSED AND IS CONSIDERED SATISFACTORY.

25X1A

S E C R E T

IN: 13514

TOR: 14/1655Z MAR 66 PJF

S E C R E T 132258Z

25X1A

IMMEDIATE ☐ INFO ☐CITE ☐

25X1A

25X1A IDEALIST MAINI-LOGS

SUBJ: ARTICLE 384 INSPECTION

25X1A

REF: ☐ (NOT RECEIVED)

25X1A

ATTN: ☐

BASED ON INFO IN REF MESSAGE IT IS DEEMED ADVISEABLE TO
REPLACE UPPER AFT ENGINE SUPPORT RING SEGMENT. DIVE BREAK AREA
IS NOT CONSIDERED CRITICAL AND NO ACTION IS TO BE TAKEN.

25X1A

☐ WILL AIRSHIP ON 14 MARCH 66 NECESSARY PARTS, HUCK BOLTS,
DD-6 RIVETS AND TOOLING REQUIRED TO ACCOMPLISH JOB. THIS RING
SEGMENT WAS PREVIOUSLY CHANGED AT ☐ ON ANOTHER ARTICLE
DUE TO OVER TEMP. THE TOTAL JOB TOOK 2 MEN 8 HOURS.

25X1A

THE DECISION TO REPLACE RING SEGMENT INVOLVES CONSIDERATION
OF TIME INVOLVED IN RE-WORK AGAINST THE RISK OF CONTINUING USE
OF A STRUCTURAL PART WITH APPARENT STRENGTH REDUCTION DUE TO
HEATING EFFECTS. PARTS REMOVED SHOULD BE RETURNED ☐
FOR MORE DETAILED AND ACCURATE STRUCTURAL ANALYSIS.

25X1A

WOULD LIKE TO BE CERTAIN THAT SPECIAL HEAT SHIELD AROUND AFT
ENGINE MOUNTING IS INSTALLED AND ALSO UPPER ACCESS PLATE ON
FUSELAGE IS A SOLID PLATE, NOT REPEAT NOT LOVERED.

YOU WILL BE ADVISED SHIPPING INFORMATION ASAP.

IN: 10514

S E C R E T

IN: 12615

TOR: 14/1657 Z MAR 66 PJF

S E C R E T 140656Z

25X1A

PRIORITY ☐INFO ☐CITE ☐

25X1A

25X1A

NO NITE ACTION

IDEALIST MAINT-LOGS

SUBJ: ENGINE 610399 INSTL ART 384

AFTER FINDING THE AFT ENGINE SUPPORT TING SEGMENT
OVER TEMPED, WE LOOKED INTO THE POSSIBILITY OF EXCESS
ENGINE HEAT LEAK. THE FOLLOWING WAS FOUND.

1. THE TOP FORWARD BLANKET OF THE TAIL PIPE WAS
REPLACED DUE TO EXCESSIVE HEAT DAMAGE.

2. THE EXHAUST TURBINE CASE HEAT SHIELD WAS FOUND
TO BE CONTRACTED WITH DISTORTION AROUND ITS CIRCUMFERENCE
AND RIDING TURBINE CASE STRUTS. THE MISALIGNMENT AT
THE TAIL PIPE ADAPTER MATING JOINT IS .15 INCH AT 12
O'CLOCK, .50 INCH AT ONE O'CLOCK, .30 INCH AT 3 O'CLOCK
.40 INCH AT 6 O'CLOCK, .34 INCH AT 7:30 O'CLOCK,
.40 INCH AT 9 O'CLOCK AND .34 INCH AT THE 10
O'CLOCK POSITION. TOTAL TIME ON ENGINE, 663.7 HRS.

3. A REVIEW OF THE HISTORICAL RECORD ON THE ENGINE (DD829)
REVEALED THAT THIS ENGINE WAS WRITTEN UP AT 581.4 HRS FOR
THIS SAME DISCREPANCY. HOWEVER THE MAGNITUDE OF DISPLACEMENT

S E C R E T

25X1A IN: 10615 CITE:

WAS LESS BY APPROXIMATELY .25 OF AN INCH ON THE ENTIRE CIRCUMFERENCE.

4. DUE TO THE OVERTEMP OF THE ENGINE MOUNT SUPPORT, THE PAST HISTORY ON THE HEAT SHIELD AND THE APPARENT PROGRESSION OF DECREASE IN HEAT SHIELD CIRCUMFERENCE, WE ARE CHANGING THE ENGINE ON ART 384.

5. IN ADDITION, WE UNDERSTAND THAT THE COMPLETION OF S/B 991 WILL AID IN COOLING IN THIS AREA. S/B KIT 991 FOR ART 384 WAS INSTALLED ON ART 383. PLEASE SEND THIS S/B SO AS TO ARRIVE AT NLE 19 MARCH.

25X1A

END OF MSG

IN: 10615 (PAGE 2 OF 2) S E C R E T

S E C R E T

IN 13619

TOR 14/1707Z MAR 66 JAI

25X1A

S E C R E T 131243Z

25X1A

IMMEDIATE INFO CITE

25X1A

IDEALIST MAINT-LOGS

SUBJ: ARTICLE 384 INSPECTION

25X1A

ATTN:

PAINT DISCOLORATION AND BARCOL READING INDICATE HIGH
TEMPERATURES EXPERIENCED AT AFT ENGINE MOUNT AND SPEED BRAKE
WELLS.

BARCOL READINGS AS LOW AS 84 TAKEN ON REAR ENGINE MOUNT
SUPPORT RING AND UPPER, FORWARD CORNER OF R.H. SPEED BRAKE
WELL.

PLEASE ADVISE HOW ABOVE READINGS COMPARE WITH DATA
PREVIOUSLY TAKEN ON OTHER ARTICLES. ASAP.

END OF MSG

S E C R E T

IN 10620

TOR 14/1712Z MAR 66 JAI

25X1A S E C R E T 140118Z

PRIORITY

INFO

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25X1A

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IDEALIST MAINT-LOGS

SUBJ: AIRFRAME INTEGRITY INSP FINAL REPORT ART 323

REF: (IN 10619)

25X1A

1. THE FOLLOWING IS A COMPREHENSIVE REPORT OF ALL DISCREPANCIES FOUND BY LAC TEAM AS A RESULT OF THE VISUAL, DYE PENETRANT, X-RAY AND HARDNESS TESTS PERFORMED ON SUSPECT AREAS. IT IS FELT THAT NONE OF THESE DISCREPANCIES FOUND WERE OF MAJOR CONSEQUENCE.

A. L AND R WING LOWER SURFACE FROM ROOT RIB OUTBOARD APPROX 24 INCHES. SCRATCHES VARYING FROM 1/8 INCH TO 9 INCHES LONG AND UP TO .010 DEEP IN RANDOM DIRECTIONS WERE FOUND ON BOTH WINGS. APPROX 20 SCRATCHES ON LEFT WING AND 30 ON RIGHT. THE SCRATCHES WERE WORKED WITH 400 PAPER AND CLEANED UP ACCEPTABLY.

B. L AND R WING LOWER SURFACE AT FILLET EDGE. A CORD WISE GROOVE FROM THE LEADING EDGE TO THE FLAP HING LINE HAS BEEN WORN IN THE WING SKIN BY THE EDGE OF THE WING FILLET. THIS GROOVE AVERAGING .015 WIDE AND VARYING FROM 0 TO APPROX .007 DEEP HAS BEEN SMOOTHED WITH 400 PAPER. THE CORNER OF THE FILLET EDGE HAS BEEN SMOOTHED AND ROUNDED TO MINIMIZE FUTURE WEAR.

S E C R E T

25X1A

IN 13628 CITE

C. L AND R WING LOWER SURFACE AT W.S. 60 AND W.S. 190 ACCESS PLATES. CRACKED PAINT AT THE RIVET HEADS LOCATED AT THE INBOARD AND OUTBOARD ENDS OF EACH OF THE FOUR ACCESS PLATE CUT-OUTS INDICATES "RIVET WORKING". DYE CHECK AND X-RAY OF THE FOUR ACCESS PLATE AREAS REVEALS NO ABNORMAL CONDITIONS. RIVETS ARE NOT TIPPED OR CUPPED.

D. L AND R WING LOWER SURFACE AT 15 PER CENT (SPAN WISE SKIN SPLICE) FROM W.S. 170 OUTBOARD APPROX 4 FEET. CRACKED PAINT AND SEEPING FUEL AT RIVET HEADS, PARTICULARLY AT ROW IN FRONT SKIN. RIVETS SHOW NO EVIDENCE OF TIPPING OR CUPPING.

E. FUSELAGE SKIN TO MAIN FRAME RIVETS. EVIDENCE OF RIVETS WORKING ABOVE AND PARTICULARLY BELOW THE WING. RIVETS ARE NOT TIPPED WITH ONLY A VERY FEW SHOWING EVIDENCE OF SLIGHT CUPPING.

F. FUSELAGE MAIN FRAME SEGMENTS BETWEEN L AND R LOWER LONGERONS. SCRATCHES AND GOUGES UP TO .015 DEEP WERE FOUND ON EACH MAIN FRAME SEGMENT AT AN AVERAGE OF 3 PLACES PER SEGMENT. THESE SCRATCHES AND GOUGES HAVE ALL BEEN BLENDED AND SMOOTHED TO PREVENT STRESS CONCENTRATIONS.

G. LOWER LONGERON AFT OF ENGINE ACCESS DOORS. SIX GOUGES, PRIMARILY ON THE EDGES OF THE LONGERON SECTION AND SPLICE GUSSETT WERE FOUND. THESE WERE ALL SMOOTHED AND BLENDED.

2. WE SHOULD COMPLETE LAC TEAM INSPECTION OF ART 384 TODAY. ONE MAJOR SUSPECT AREA, SEE REF. WILL PROVIDE COMPREHENSIVE REPORT UPON COMPLETION.

END OF XSG